corresponding to the claim 1 DOWN signal, PDB as corresponding to the claim 1 UP signal, Vpsrc as corresponding to the claim 1 DOWN signal, and Vnsrc as corresponding to the claim 1 UP signal (paragraph bridging pages 2 and 3 of the Office Action). Thus, at the outset, it is clear that the Office Action uses two entirely different signals of Arcus (PD and Vpsrc) to correspond to the same claim 1 DOWN signal and two entirely different Arcus signals (PDB and Vnsrc) to correspond to the claim 1 UP signal. This in and of itself is illogical and demonstrates that claim 1 is not anticipated by Arcus. Moreover, Arcus makes abundantly clear that his up and down signals are not any of the PD, PDB, Vpsrc or Vnsrc signals. Throughout Arcus the up and down signals are denoted as UP and DN, with their complements being respectively identified as UPB and DNB (see, for example, column 1, line 62; column 2, lines 5-30; column 3, lines 1,2; column 6, lines 46-49).

The signal denoted in Arcus as PD is in reality a power down signal PD with the inverse power down signal being denoted as PDB (column 10, lines 33-37). PD is not an up or down signal used to drive the charge pump to add or subtract charge at output Vctl. The PD and PDB signals only enable operation of the Fig. 9 charge pump. The actual up and down signals in Fig. 9 of Arcus which add or subtract charge at the output Vctl are the UPB and DNB signals applied to the gates of transistors 40 and 50. The signals Vpsrc and Vnsrc are the actual signals which add or subtract charge to or from the output Vctl. See discussion of the Fig. 5 embodiment of Arcus at column 7, lines 16-to 62 which discusses the current steering operation used in Arcus Fig. 9. See also column 10, lines 43-46 which note that Arcus Fig. 9 utilizes the Fig. 5 steering logic.

Since the Arcus Fig. 9 circuit only uses the signals UPB and DNB which are respective complements of the up (UP) and down (DN) signals to affect the output signal Vctl, the Arcus reference cannot anticipate the claim 1 invention which requires use of up and down signals UP, DOWN as well as their complements $\overline{UP}$, $\overline{DOWN}$ which are applied to affect the output signal, as recited in claim 1.

Still further, Arcus also does not apply a $\overline{DOWN}$ pulse signal to a gate of one of a first plurality of serially connected transistors, an UP signal to a gate of one of a second

plurality of serially connected transistors, a DOWN pulse to a first node at the interconnection of the first plurality of transistors and an UP pulse to a second node at the interconnection of the second plurality of transistors, as recited in claim 1.

Thus, the anticipation rejection of independent claim 1 and dependent claims 2-4 is erroneous and withdrawal of the same is respectfully requested.

Claim 8 defines the invention somewhat differently and requires, inter alia, "a gate of one of said first plurality of transistors being adapted to receive a first switching signal," "a gate of one of said second plurality of transistors being adapted to receive a second switching signal", "a first node at the interconnection of transistor of said first plurality of transistors being adapted to receive a complementary first switching signal, and a second node at the interconnection of transistors of said second plurality of transistors being adapted to receive a complementary second switching signal." Arcus does not use first and second switching signals and their complements to affect the output of the Fig. 9 circuit. At best, only first (UPB) and second (DNB) switching signals are used. The complement signals UP and DN are not used in the Arcus Fig. 9 circuit.

Accordingly, the anticipation rejection of claim 8 is erroneous and withdrawal is requested.

Claim 23 recites a method of operating a charge pump comprising, inter alia, "switching a first switching transistor in response to a first applied switching signal to affect an output at an output terminal", "switching a second switching transistor in response to a second applied switching signal to affect an output at said output terminal", "coupling a complementary signal of said first applied switching signal to a connection between said first switching transistor and an associated bias transistor", and "coupling a complementary signal of said second applied switching signal to a connection between said second switching transistor and an associated biasing transistor". These features are not present in Arcus which, as noted, does not utilize first and second applied switching signals and their complements to control the output voltage. Only switch signals UPB and DNB are used

to control the output voltage.

Accordingly, the rejection of claim 23 and dependent claim 24 is erroneous and withdrawal is requested.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

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Respectfully submitted,

By_____

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Version With Markings to Show Changes Made

Please rewrite claim 23 as follows:

23. (Twice Amended) A method of operating a charge pump comprising:

switching a first switching transistor in response to a first applied switching signal to affect an output at an output terminal;

switching a second switching transistor in response to a second applied switching signal to affect an output at said output terminal;

biasing the switching characteristics of said first and second switching transistors with bias transistors respectively serially connected to said first and second switching transistors;

coupling a complementary signal of said first applied switching signal to a connection between said first switching transistor and an associated bias transistor; and

coupling a complementary signal of said second applied switching signal to a connection between said second switching transistor and an associated bias transistor[to maintain a substantially continuously controlled voltage at said output terminal].